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ALASKA ECONOMIC TRENDS

July 1990

Manufactured in Alaska

The Aleutians

April: Employment Growth Slows

ALASKA DEPARTMENT OF LABOR STEVE COWPER, GOVERNOR

ALASKA ECONOMIC

TRENDS

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Manufactured In Alaska

By Neal Fried

The manufacturing industry doesn't grab many business headlines in Alaska. Manufacturing doesn't seem to command the economic punch of the oil industry and is seldom considered an integral part of the fishing or timber industries. And what insures anonymity for Alaska's manufacturing industry is the fact that it is a relatively small industry in terms of the number of people employed.

They Come In All Varieties and Sizes

In spite of the industry's size (7% of the state's wage and salary work force), there are nearly 500 manufacturing employers in Alaska. They range in size from Ketchikan Pulp Corporation, with more than 800[1]/ workers, to The Ulu Factory of Anchorage with six employees.

Although there are nearly 500 Alaska manufacturers, employment is concentrated in the bigger firms. Approximately 80% of Alaska manufacturers have 49 employees or less, but 82% of the industry's employees work for employers with 50 employees or more. In the Alaska Department of Labor's last count of the top 50 employers in Alaska, manufacturing had 11 firms in the top 50. No other industry had a greater number of firms represented among Alaska's largest employers.

Who Are Alaska's Manufacturers?

Among Alaska's manufacturers are fish processors, newspapers, pipe fabricators, timber companies, machine shops, bakeries, print shops, refineries, jewelers, concrete mixers, and furriers. (See Table 1.) Some of Alaska's new high-profile manufacturers include Anchorage-based Alaska Mountaintop Spirits Company, which produces Attakiska vodka, Chinook Brewery of Juneau, and Chugach Forest Products' new sawmill in Seward. As evident from the diverse firms listed above, the definition of manufacturing is quite broad. The official U.S. Department of Commerce definition of manufacturing is a business engaged in "mechanical or chemical transformation of materials or substances into new products". It also includes businesses involved in "assembling component parts of manufactured products if the products are neither a structure nor other fixed improvement." An example of this would be the Wolf Computer Company in Angoon that assembles personal computers.

Table 1

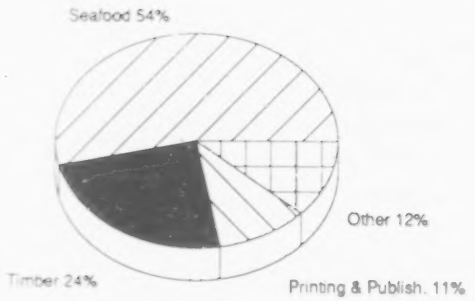
Alaska Employment in Manufacturing and Selected Subcategories

	1988 Employment	Percent Share
Total Manufacturing	15,204	100.0%
Food & Kindred Products	8,486	55.8
Seafood Processing	8,189	53.9
Textile Mill Products	320	2.1
Apparel & Other Textile	48	0.3
Lumber & Wood Products	2,670	17.6
Paper & Allied Products	948	6.2
Printing & Publishing	1,678	11.0
Newspapers	1,282	8.4
Commercial Printing	254	1.7
Petroleum & Coal Products	286	1.9
Stone, Clay & Glass Products	260	1.7
Primary Metal Industries	11	0.1
Fabricated Metal Products	149	1.0
Transportation Equipment	179	1.2
Ship & Boat Building	161	1.1

Source: Alaska Department of Labor, Research and Analysis Section

Figure 1

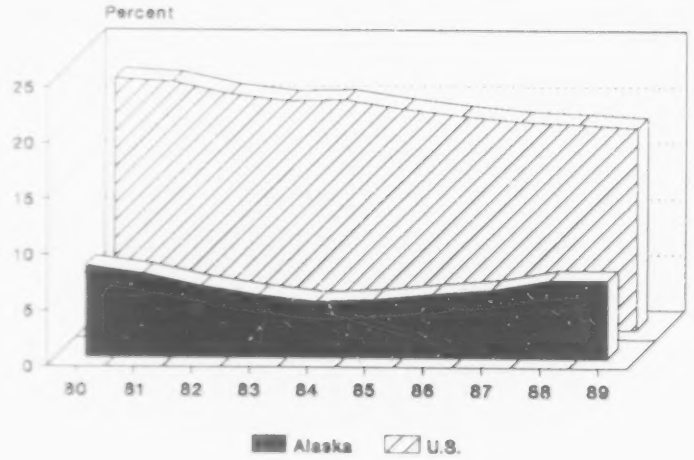
Alaska's Manufacturing Industry 1989



Source: Alaska Department of Labor, Research and Analysis Section

Figure 2

Manufacturing's Share of Total Employment



Source: Alaska Department of Labor, Research and Analysis Section

There are some activities, such as logging, that are not normally associated with manufacturing. Although taking a tree and turning it into a log represents a minimal amount of manufacturing it is considered manufacturing, nevertheless. Some might also say this about newspapers, but there is a major printing process, involving chemicals and assembly, in publishing a newspaper.

Manufacturing in Alaska: Advantages

Alaska's abundant natural resources are the number one asset for many manufacturers. Whether it be furs, oil, fish or timber, proximity to the raw materials is an advantage for Alaskan manufacturers.

Another advantage some Alaska manufacturers tout is their ability to produce custom-made products for local conditions. Alaska Battery Manufacturers and Alaska Windows are examples of manufacturers whose products are made specifically for Alaska's climate.

Proximity to demand can also work to a manufacturer's advantage. Some businesses require custom-made products that cannot always be ordered from a manufacturer outside Alaska. The desire of visitors to purchase locally made items also provides an incentive for many Alaska manufacturers. Some items such as insulation may be cheaper to manufacture locally because they are bulky and therefore expensive to ship.

Manufacturing in Alaska: Disadvantages

There are also disadvantages that Alaska manufacturers must struggle with to remain competitive. One mentioned repeatedly is freight expense. This affects manufacturers who either import their raw materials or export their products. Alaska's small markets can also be a big disadvantage. It is often tough to be competitive with much larger national operations. For other manufacturers, competing with areas having lower labor costs creates somewhat of a barrier for local manufacture.

Manufacturing Adds Value and Boosts Alaska's Economy

In the manufacturing process, value is added to a product. In Alaska this usually means taking a natural resource (fish, timber, oil, berries or water) and turning it into a semi-finished or finished product (canned salmon, lumber, aviation fuel, jelly or beer). In addition to raw materials, labor and other services are consumed during the value added process. And this generates more income, payroll, employment and overall economic activity in the state. The U.S. Department of Commerce estimated that in 1987, Alaska's manufacturers added $827 million of value to the $2.7 billion of manufactured products they shipped.

Alaskan Products are Consumed Locally, Nationally and Internationally

Some of Alaska's manufactured products are produced for local consumption, some are exported to other markets, and some are produced for both markets. One example of local consumption is The Bagel Factory in Anchorage which makes bagels and other products.

When a manufacturing firm starts producing a product for local consumption the process of "import substitution" usually occurs. This means that all or some of a previously imported product is being replaced by local production. An example of this was when Aurora Upholstery & Mattress of Fairbanks began manufacturing mattresses for the Alaska market. Import substitution is desirable because it generates more economic activity through the "value added" process and local income is retained longer in the community.

In Alaska's case most manufactured products are exported both to other states and internationally. Alaska exports proportionately more of its manufactured products internationally than any other state in the nation. In fact, Alaska's "Exporter of the Year" in 1989 was awarded to a manufacturer-Klukwan Forest Products. Exporting manufactured goods is desirable because it brings "new" income into the state and generates "value added" activity.

Table 2

Alaska's Top 15 Manufacturing Areas
(Ranked by employment)

	1988 Manufacturing Employment	Manufacturing as Percent of Total Employment
Municipality of Anchorage	2,119	2.1%
Kenai Peninsula Borough	1,486	13.4
Kodiak Island Borough	1,479	30.6
Ketchikan Gateway Borough	1,378	20.1
Wrangell-Petersburg Census Area	999	35.5
Aleutians West Census Area	961	29.6
Valdez-Cordova Census Area	859	21.5
Prince of Wales-Outer Ketchikan C.A.	750	37.4
Dillingham Census Area	719	31.9
Sitka Borough	701	19.0
Aleutians East Borough	639	62.5
Fairbanks North Star Borough	582	2.3
Haines Borough	576	47.3
Skagway-Yakutat-Angoon Census Area	377	24.0
Bristol Bay Borough	296	28.4

Source: Alaska Department of Labor, Research and Analysis Section

Seafood Processing and Timber Dominate Manufacturing

Although a variety of manufacturers operate in Alaska, the industry is dominated by a few products. (See Figure 1.) A little over half of all manufacturing employment is in the seafood processing industry; another 24% is in timber and paper products. Although these are two high-profile economic mainstays in Alaska's economy, not all of their activities are associated with manufacturing.

It is conceivable the fishing and timber industries could operate with very little Alaskan-based manufacturing employment. This could be accomplished by shipping all of the raw timber and fish products out to be processed elsewhere in the world. But instead manufacturers in these two industries have chosen to do some or all of the processing in Alaska.

For example, the timber industry employed 3,846 workers in 1989. And at least 40% of these jobs were involved with more intensive processing than simply logging, including producing pulp, cants and other wood products. If the industry simply shipped out raw logs those 1,526+ manufacturing jobs would not exist. These manufacturing jobs do not include other direct jobs in support industries such as transportation and government. Also not included are the indirect jobs generated by the pulp and saw mills. This manufacturing activity in the timber industry would all be characterized as "value added activity." In 1982 the Bureau of Census estimated that out of the $259 million value of Alaska's lumber and wood products, $94 million (excludes pulp products) of it could be attributed to the value added by the manufacturer.

It is a little less credible to argue that the seafood industry could also operate without its manufacturing arm because much of its product would spoil if not processed in proximity to where it was harvested. However, with the advent of factory trawlers it is also conceivable

Table 3

Manufacturing's Share of Total Employment by State, 1989

Rank	State	Manufacturing as Percent of Total Employment
1	North Carolina	28.3%
2	Mississippi	26.4
3	Indiana	26.0
4	South Carolina	26.0
5	Arkansas	25.8
6	Wisconsin	24.9
7	Michigan	24.8
8	Tennessee	24.3
9	Alabama	24.2
10	Rhode Island	23.5
11	Ohio	23.3
12	New Hampshire	21.6
13	Connecticut	21.4
14	Delaware	21.1
15	Pennsylvania	20.5
16	Kentucky	19.8
17	Maine	19.6
18	Iowa	19.5
19	Georgia	19.3
20	Minnesota	19.1
21	Missouri	19.0
22	Illinois	19.0
23	Vermont	18.4
24	Massachusetts	18.1
25	Oregon	18.0
26	Washington	17.7
27	New Jersey	17.6
28	Kansas	17.3
29	California	17.2
30	Idaho	16.5
31	Virginia	14.9
32	Utah	14.9
33	New York	14.4
34	West Virginia	14.3
35	Texas	14.2
36	Oklahoma	14.1
37	Nebraska	13.4
38	Colorado	13.1
39	Arizona	12.9
40	South Dakota	11.5
41	Louisiana	11.5
42	Florida	10.3
43	Maryland	9.7
44	Montana	7.6
45	New Mexico	7.5
46	**ALASKA**	7.0
47	North Dakota	6.3
48	Wyoming	4.5
49	Nevada	4.4
50	Hawaii	4.2
	U.S. Average	18.1

Source: U.S. Department of Labor, Bureau of Labor Statistics

that all of the product could be processed without accruing any "value added" to Alaska. The last time the Department of Labor made employment estimates for fish processing and harvesting, the processing end was responsible for 39% of the employment. And although 51% of these jobs are held by nonresidents, processing the product added 27% to the total value of the product Alaska sells.

Manufacturing other than Seafood and Timber

The remaining 25% of the state's manufacturing employment is spread among a number of activities. Employment-wise, the next largest group of manufacturers is printing and publishing. This category includes both newspapers and commercial printing operations. Two firms in this category are among the top 50 employers in the state -- the Anchorage Daily News and the Anchorage Times. On the printing side there are a large number of small and medium-size players. Most of their production is for local consumption and could be characterized as a "service" variety of manufacturing.

Another important group of manufacturers, particularly when it comes to product value, is Alaska's hydrocarbon refineries. Included in this category are four oil refineries (two in Fairbanks and two on the Kenai Peninsula) and an LNG (liquified natural gas) and urea plant. Quantifying their impact is difficult from a statistical standpoint because some of their employment and product value is accounted for in the oil and gas industry category. However, the U.S. Department of Commerce estimated that added value to petroleum products in Alaska was $178 million in 1982, not far behind fish processing.

It is more difficult to arrive at values of product and employment figures for the rest of the manufacturing categories represented in the state. Employment-wise they represent 12% of the manufacturing employment. Among this group are furriers, metal fabricators, concrete mixers, bakeries and other food processors. Most of these manufacturers are relatively small employers, with a few exceptions such as Sunrise Bakery of Anchorage with 100 employees. As a group their

employment has grown more rapidly than the rest of manufacturing. One group that has grown particularly quickly is ship and boat building, where employment has almost doubled since 1980. The small firms' share of Alaska's manufacturing activity, however, has remained largely unchanged during most of the past decade.

Manufacturing- A Mainstay In Many of the Coastal Communities

The area with the highest concentration of manufacturing employment is the Aleutians East Borough. (See Table 2) There, 63% of all wage and salary employment is in manufacturing, and virtually all the manufacturing is seafood processing. Another area with a heavy concentration of manufacturing is the Haines Borough where nearly half of the jobs are in manufacturing -- a heavy dose of timber-related manufacturing plus some seafood processing activity.

Most of Alaska's coastal communities are heavily reliant on manufacturing as a source of employment. Southeast Alaska, for example, relies heavily on manufacturing (17%) as a source of employment because of its well-developed timber and fishing industries.

The Kenai Peninsula has the most diverse manufacturing sector in the state. In addition, the Kenai manufacturing sector produces the highest value in manufactured shipments of any area in the state. Kenai manufacturers include a substantial hydrocarbon-based manufacturing industry (see above) and fishing industry. The Peninsula also has an emerging timber industry. In January the high-tech Chugach Forest Products sawmill was opened in Seward. It will be cutting finished dimension lumber as well as wood chips for local Alaskan markets and export.

The community with the largest number of manufacturing employees, more than 2,000, is Anchorage. With the exception of the timber industry, all the types of manufacturers mentioned above are in Anchorage, plus a host of other small ones -- furriers, machine shops, vodka makers, butchers, bakers and yes, a candlestick maker. Anchorage manufacturers produce primarily for local consumption but there is also an export-related market. Fairbanks has a similar mixture of manufacturing employment, except for the fact that it is home to two oil refineries, MAPCO and Petro Star.

Alaska's Manufacturing Experience Different from the Nation's

Compared to the rest of the nation, manufacturing in Alaska is a modest affair: 18% of the nation's work force is employed in manufacturing compared to 7% in Alaska. (See Figure 2 and Table 3) Unlike Alaska, the national manufacturing scene gets front page play. In many respects the nation's economic well-being is measured by the strength of its manufacturing sector. And during the last decade, the outlook for the nation's manufacturing sector has not been very positive. Employment has fallen by more than half a million and projections of manufacturing employment usually show the nation's manufacturing sector continuing to decline.

Alaska's manufacturing trends have been quite different from the nation's. Alaska's manufacturing industry has enjoyed growth during most of the past decade and it is still growing. But drawing parallels may not be altogether fair because the industry makeup of Alaska versus the nation is so dissimilar. As mentioned earlier, timber and fish products are responsible for 78% of Alaska's manufacturing employment compared to 24% nationwide. The demand for Alaska's manufactured products is largely driven by the demand for natural resources. On a national scale it is the demand for finished products that determines manufacturing's fate -- products such as autos, high-tech equipment, textiles, and steel products. Fierce international competition in these markets has battered the nation's manufacturing industry.

This does not imply that Alaska's manufacturing industry is solid. Because so much of Alaska's manufacturing industry is resource-based, it is exceptionally sensitive to changes in world resource prices/exchange rates, demand, and the vagaries of nature. The crash of the king crab fishery, the collapse of the timber market in the early 1980s, and the dramatic drop in oil prices in 1986, are all reminders of the vulnerability of Alaska's manufacturing industry.

The Potential For A Manufacturing Bonanza Exists

Alaska's biggest challenge for future manufacturing will be its attempt to capture more "value added" in the fishing and timber industries. It is this effort which has the greatest potential for generating additional manufacturing employment. Although fishing and timber generate the largest share of manufacturing activity, much of their product leaves the state with little or no processing.

For example, in 1989 offshore trawlers harvested 80% of the bottomfish caught in the Bering Sea/Aleutian Islands. Most of the fish processed in Alaska goes through only a primary processing stage and the secondary processing takes place elsewhere. In other words, salmon is sold whole frozen and not in fillets, surimi paste is shipped elsewhere to be turned into artificial crab legs and pollock leaves the state in blocks instead of fish sticks. If Alaska were able to tap more of this activity, literally thousands of additional jobs would be created, jobs paying more than the standard $7/hour processing variety. The Japanese once estimated that the Bering Sea fishery alone produced 500,000 jobs in Japan. This is double the present size of Alaska's entire labor force.

On the timber side the story is not much different. Approximately 60% of Alaska's timber exports are raw logs. Looking at this simplistically, Alaska could more than double its timber manufacturing employment if most logs were processed in state. For every million board feet harvested, 2.4 loggers are employed; if these logs are processed into pulp they create another 2.4 jobs, into kiln-dried lumber 2 additional jobs are created.

The advantage of more value added scenarios in the logging and fish industries, at least theoretically, is that no new industry has to be developed or created from the ground up, nor would harvests of natural resources have to grow. Instead, Alaska merely has to

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capture more of the activity already taking place somewhere else in the world.

Some manufacturers are taking steps to capture more of the added value of these resources. Fillet machines and the production of boneless and skinless canned salmon are becoming more common sights in Alaska's fish processing operations. Fish processors such as Silver Lining of Ketchikan, Seafoods from Alaska and others are producing a variety of finished products for the national and international markets. The expansion of the Fishery Industrial Technology Center in Kodiak is an indication of a growing commitment to help the industry research and develop new product lines.

Examples of new value added activity in the timber industry also exist. The aforementioned Chugach Sawmill in Seward is producing finished dimensional lumber for local and international markets. There is also talk of building a press board plant in Seward to utilize some of the by-products of the Chugach plant. The Ketchikan Pulp Company added a sawmill to its operations in 1988, and two additional sawmills may open in Southeast Alaska in the near future.

There are a number of other possibilities that provide hope for the future of Alaska's manufacturing industry. As long as the state's market grows, Alaska's smaller manufacturers will find more opportunities. There are even some business leaders who believe a light manufacturing industry in Alaska may get a boost around Alaska's growing role as an international air-transshipment point.

There has also been an effort by a number of groups to promote manufacturing in Alaska. They include the Interior Manufacturer's Association, the Alaska Manufacturer's Association, the Made In Alaska program and a number of handcraft programs. It is important to note that the State of Alaska's bidder preference law gives local manufactured goods an advantage. And the amount of preference is contingent on how much of the value added process takes place in Alaska.

Notes:

1/ Includes all aspects of Ketchikan Pulp Corp. operations, including logging and sawmill activities.

Summary -- Manufacturing: A Small, But Important Industry

Manufacturing is indeed a small industry in Alaska but it provides important infrastructure to the economy -- particularly to the fishing and timber industries.

Most of Alaska's manufacturing activity is related to one of Alaska's many natural resources, which includes fish, timber, furs, oil and a host of others. But there are also other manufacturing firms which produce a wide variety of goods in the state.

Alaska is often a tough climate for manufacturers to operate in. The state's markets are small, freight bills can be prohibitive and labor costs can be high. But the proximity to such natural resource wealth gives Alaska some advantages. The demand for on-site custom manufactured products, fresh products, Alaska-made products for visitors and other small niches has also provided incentive for many manufacturers to operate in the state.

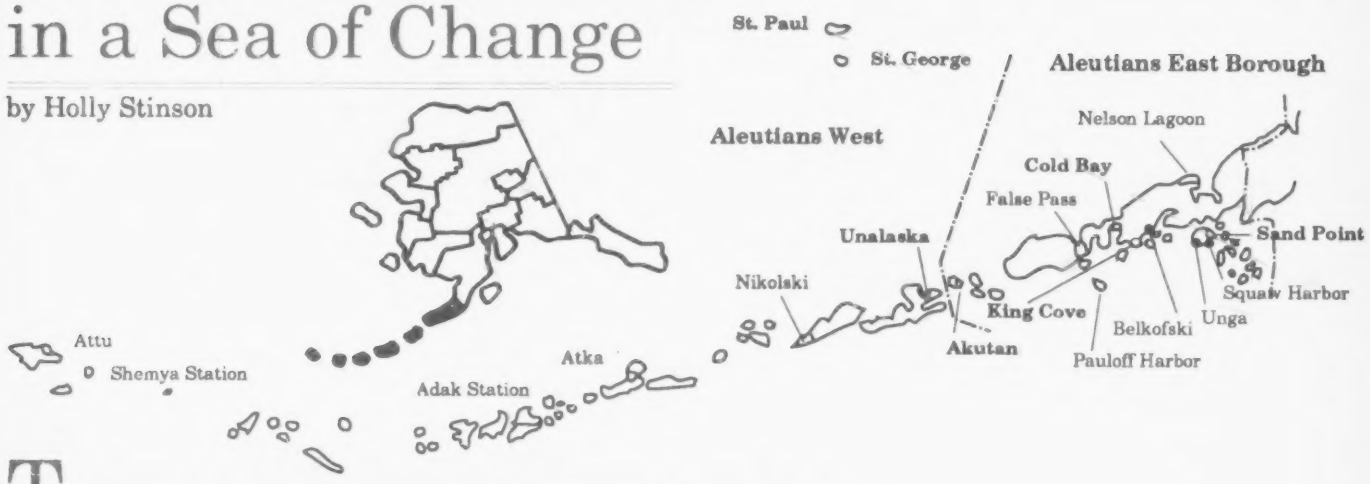
Seafood and timber account for three quarters of the state's manufacturing industry. Printing and publishing and refining petroleum products take up most of the rest. The emphasis on seafood and timber also means these are the industries of particular importance to Alaska's coastal communities, where most of this activity takes place.

Although the state's manufacturing industry is small its potential is great. Most of the fish and timber products processed in Alaska today go through a primary processing stage and the rest of the processing is performed elsewhere in the country or world. All Alaska would have to do is capture more of the value added activity and the manufacturing industry would grow dramatically. If this happened, manufacturing could also help replace oil revenue activity.

Both timber and fish processing employment helped to cushion the economies of many communities during Alaska's recent recession. The manufacturing industry could help mitigate the decline in oil revenue-related activity if it continues to grow.

The Aleutians: Islands in a Sea of Change

by Holly Stinson



To many Alaskans, the Aleutians are not really thought of as part of the state. Instead, they are seen on maps as a tiny box of islands floating in the Gulf of Alaska. For most Aleutians residents, their economic lifeline has been with Seattle more so than with other parts of Alaska. Geography explains both of these points. The Aleutians are a chain of volcanic islands that extend west from the Alaska Peninsula in an 1,100 mile-long arc. (See map.) They serve as a dividing line between the Bering Sea and the North Pacific Ocean. This great distance, along with the very fact that they are islands, means they are isolated communities. Their location has dictated the structure of their economy to a great extent.

The Aleutian and Pribilof Islands are home to two separate types of communities: the military enclaves supported by the Pentagon and the civilian communities supported almost entirely by the fishing industry. Both types of communities are undergoing change to some degree. With the ending of the Cold War, the function of military bases is being redefined; the economies of the civilian communities are changing as the structure of the fishing industry changes. This article discusses the current economic picture of these changing communities in the two census areas that include the Aleutian and Pribilof Islands.

Economy of Eastern Aleutians Tied to Salmon Harvest

The Aleutian Islands recently divided when the Aleutians East Borough was formed in 1986. Six communities make up the Aleutians East Borough -- Cold Bay, King Cove, Nelson Lagoon and Sand Point on the Alaska Peninsula and Akutan and False Pass on the chain of Aleutian Islands. According to a 1988

Table 1

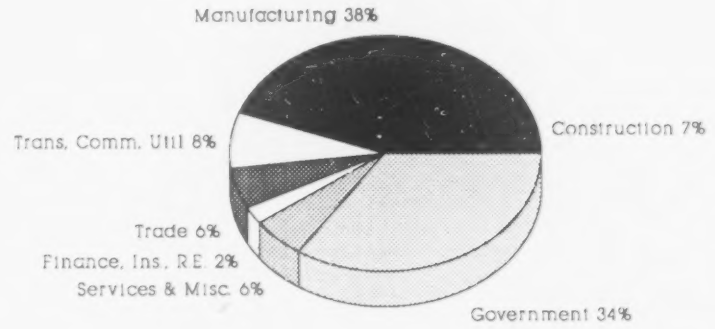
Aleutian Islands Population in 1988

	Total Population	Uniformed Military
Total Aleutian Islands	8,274	2,698
Aleutians East Borough	1,573	
Akutan	86	
Cold Bay	154	
False Pass	87	
King Cove	535	
Nelson Lagoon	65	
Sand Point	615	
Balance of Aleutians East Borough	31	
Aleutian Islands West Census Area	6,701	2,698
Adak	4,143	2,076
Atka	83	
Attu	27	27
Nikolski	34	
Shemya	603	576
St. George	156	
St. Paul	521	19
Unalaska	1,131	
Balance of Aleutian Islands West	3	0

Source: Alaska Department of Labor, Research and Analysis Section

Figure 1

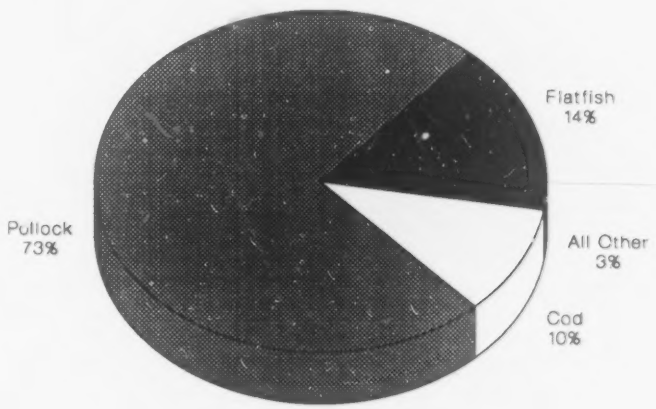
Aleutian & Pribilof Islands Employment by Industry, 1988



Source: Alaska Department of Labor, Research and Analysis Section

Figure 2

Groundfish Catch in Aleutians* In 1989



* Includes Aleutian Bering Sea and Western Gulf Regions.

Source: Alaska Department of Fish and Game

estimate, 1,573 people lived in the Borough, almost three-fourths of them in King Cove and Sand Point. (See Table 1.)

The entire Aleutian chain relies on the fishing industry, but this eastern portion traditionally depended more on the salmon harvest while the western half relied more on the crab, and now groundfish, harvest for their livelihood. All of the communities in the Aleutians East Borough with the exception of Cold Bay rely on fishing and fish processing for their main economic activity.

Majority of Jobs in Processing, Government

A glance at Figure 1 and Table 2 reveals a regional economy based overwhelmingly on government and manufacturing. Almost three-fourths of all jobs -- 72% -- are in these two sectors. In this region, manufacturing jobs almost exclusively mean seafood processing jobs. This eastern portion of the region is no exception. Processors are located throughout the Borough, both land-based and floating operations. The Peter Pan plant at King Cove is one of the largest processing facilities in the state. Trident recently opened a new plant at Akutan which will employ as many as 400 people to process pollock into various products, including fish meal and surimi. One community seen on the map but not mentioned here is Port Moller, because this "community" consists entirely of a seafood processing plant.

Most of the jobs with the processors, though, are not held by local residents. Many processing facilities are so self-contained as to be called a "community within a community". They supply their own food and housing needs, and generate their own electricity. Few goods or services are bought through the local economy. In some communities a firm's management may live in town, and local residents may staff the firm's office. Local residents are more often employed in other industry sectors -- trade, services, transportation or government -- or in fish harvesting.

Table 2

Aleutian Islands Wage & Salary Employment - 1980-1989*

	1980	1981	1982	1983	1984	1985	1986	1987	1988	9 mo. Avg. 1988	9 mo. Avg. 1989*
Total	3,252	3,436	3,158	3,387	3,231	3,172	3,418	3,565	4,273	4,252	4,647
Mining	**	**	**	**	**	**	**	**	**	**	**
Construction	112	118	81	131	108	147	210	214	290	265	138
Manufacturing	1,586	1,625	1,255	1,269	870	874	959	1,173	1,600	1,884	2,114
Transportation	127	183	209	191	186	237	247	312	325	332	369
Trade	111	122	121	116	197	127	203	216	221	212	235
F.I.R.E.	**	**	**	**	**	**	**	**	**	**	**
Services & Misc.	160	161	170	313	371	306	277	207	254	278	211
Government	1,081	1,131	1,230	1,267	1,324	1,337	1,385	1,315	1,467	1,431	1,489
Federal	676	686	723	729	720	694	742	682	825	776	854
State	68	66	76	72	74	80	74	70	81	76	83
Local	337	379	431	467	530	563	569	563	561	579	552

* Only the first three quarters of 1989 data are available.

** Nondisclosable

Source: Alaska Department of Labor, Research & Analysis Section.

Cold Bay is Air Hub for Eastern Region

One town in the Aleutians East Borough doesn't have a fishing orientation. Cold Bay was developed during World War II as a military base, and today remains the major air transportation hub for the area. With one of the longest runways in the state, the city would like to entice some air carriers flying the West Coast to Orient route to use Cold Bay as a refueling stop, shaving both miles and time off the stop in Anchorage.

Cold Bay is also hoping to improve their dock facilities in order to attract ships for supplies and services. Their deep water port and strategic location both offer potential for development. The dock plans are firmer than the airport scheme at this time. The Aleutians East Borough is funding $1.1 million of the estimated $3.3 million cost and plans are to have the project out for bid by spring 1991. Sand Point is also in the middle of a harbor and dock expansion, hoping to capture some of the boat storage business from people who now make the trip to Kodiak or Anchorage for winter storage of their vessels.

Western Aleutians & Pribilofs Have Majority of the Jobs

The Aleutian Islands West census area is comprised of three Aleutian communities -- Atka, Nikolski and Unalaska -- plus the two Pribilof Island communities of St. Paul and St. George. Five military installations are also included in this area. Table 3 shows how employment is split between the Aleutians West and Aleutians East. More than three-fourths of the jobs are in the Aleutians West census area, and an overwhelming number of jobs in this western portion are in Unalaska. Atka, Nikolski, St. Paul and St. George all have a handful of private firms. Shemya has a few private employers and some federal jobs. Adak has more than 20 private firms, 8 state agencies, over 100 local government employees, and nearly 700 federal jobs. The rest of the employment is all in Unalaska.

Unalaska: Groundfish Harvest Creates a Boom Town

This western Aleutians community has bounced back from the king crab crash in the early 1980s to become Alaska's most enduring boom town. Ranked first in value of seafood landed in 1978 and

Table 3

Employment by Census Area 1988

	Aleutians East Borough Annual Average	Aleutians West Census Area Annual Average
Total	1,022	3,251
Mining	*	*
Construction	11	279
Manufacturing	639	961
T.C.U.	60	265
Trade	46	176
F.I.R.E.	*	*
Services & Misc.	21	233
Government	211	1,256
Federal	29	796
State	0	81
Local	182	379

* Nondisclosable

Source: Alaska Department of Labor, Research and Analysis Section

1979, its economy crashed as the stocks of king crab crashed. With the emergence of the groundfish harvest in the North Pacific and Bering Sea, this town has made an economic comeback.

In 1989 Unalaska was second in the nation, behind Bedford, Mass., in value of seafood landed ($107 million). Unalaska's harbor (Dutch Harbor) is the main port for servicing the expanding fleet of groundfish harvesters and processors. The major buildup in docking and servicing facilities took place over the last three years. Activity at the harbor is now levelling off at about 6,000 vessel calls a year.

This figure includes several dockings by foreign vessels. Not only do they take on fuel and supplies at Unalaska, but a brisk trade is carried on by local merchants who sell to foreign sailors anxious for consumer products. In addition to helping the private sector, ships docking at Dutch Harbor also bring revenue into city coffers. A 3% city sales tax brought $3.2 million in revenues from sales of fuel and other goods. The city's raw fish tax brought another $2.4 million into the city treasury.

The increase in local economic activity has also meant an increase in water and air transportation service. Employment in this sector almost doubled in the last five years. The boom has also inevitably meant an increase in population. The city manager estimates there are now about 2,500 permanent residents. He notes, though, that the actual number of people in Unalaska at any one time varies from 5,000 to 7,000 depending on local activities. The limiting factor for much economic activity is the chronic shortage of housing. The shortage is being eased somewhat this summer as the local Native corporation and several private firms build new housing units. With the fluctuation in population it is hard to say if the new facilities will be adequate to ease the housing crunch.

Processors in Unalaska Expanding

In addition to servicing the floating processor fleet, Unalaska is home to several land-based seafood processing plants. Three firms already in Unalaska are undergoing major expansions in order to take advantage of the latest seafood products: surimi and fish meal.

Surimi is a fish paste made from pollock; fish meal is made from fish parts wasted in traditional processing. Alyeska Seafoods has spent over $12 million building a new fish meal plant which will quadruple their product output. They also make creative use of another waste product -- fish oil -- by mixing it with diesel fuel to operate their power plant and some of the processing equipment.

UniSea will finish a $60 million expansion by this September which will double both their fish meal and surimi processing. With housing in short supply, part of their expansion includes two new bunkhouses for employees. Even though the production of fish meal is highly automated and not labor intensive, UniSea's expansion will create 200 new jobs. Westward Fisheries is also expanding their seafood and surimi plant -- up to $70 million worth of new plant will translate into 250 new jobs by early 1991.

The Changing Groundfish Story

Today's economic activity in Unalaska would not be happening if not for the Magnuson Act, passed in 1976, which extended American control of the fisheries from 3 to 200 miles offshore. Previously, groundfish were harvested by foreign fleets and taken to foreign shores. Joint ventures began harvesting in the Aleutian area by 1980 -- Americans caught the fish and delivered them to foreign processors at sea. By 1987, the joint-venture fishery accounted for 90% of the total Eastern Bering Sea groundfish harvest.

Since then, the joint-ventures are being displaced by American-owned floating processors and onshore processors. Their 90% allocation in 1987 has been turned around. In 1990, their share of the groundfish is 10% while the American companies' share is 90%. The caveat to be mentioned here is that many American companies are partly or wholly owned by Japanese firms. A total "Americanization" of the groundfishery has not yet occurred.

Table 4 shows the importance of the groundfish harvest. It accounts for 34% of the state's total seafood value, nearly equal to the salmon harvest's 38% share. Almost all (90%) of the groundfish catch is harvested in the region covered in this article (designated Aleutian Islands, Bering Sea, and Western Gulf). As can be seen in Figure 2, pollock is the major species of groundfish harvested, making up 73% of the groundfish catch in this region.

Residents Catch, Instead of Process, Fish

Although the fishing industry is the lifeblood of most Aleutian communities, local residents are more often engaged in fish harvesting instead of fish processing. In 1988 the Commercial Fisheries Entry Commission issued 346 fishing permits to persons with Aleutian Islands addressess. Counting in crewmembers would greatly increase the number of people actually harvesting. Most seafood harvesting jobs are not included in the Alaska Dept. of Labor's (AKDOL) statistics, so they are not reflected in the tables or figures accompanying this article.

Table 4

Value of Commercial Fish Harvest In 1989

Species	Total Value (in thousands)	Value of Aleutian Catch (in thousands)	Aleutian catch as % of Total
King crab	$104,976	$101,316	96.5%
Tanner crab	156,225	131,931	84.4
Dungeness crab	8,151	10	0.1
Shrimp	1,343	0	0.0
Misc. shellfish	3,256	1,886	57.9
Halibut	76,100	6,782	8.9
Groundfish	456,600	410,058	*89.8
Salmon	505,332	56,300	11.1
Herring	18,800	1,300	6.9
TOTAL	$1,330,783	$709,583	53.3%

*Estimate

Source: Alaska Department of Fish & Game

St. Paul, St. George Expand Harbors

Northwest of Unalaska are the Pribilof Islands of St. George and St. Paul. The economies of both communities are changing since the fur seal harvest ended in 1983. St. Paul served to some extent as a base for oil and gas exploration activity in the early 1980s. The local seal plant was converted to a seafood plant and now processes crab, cod and halibut. The big news in St. Paul is the new $30 million investment in improved harbor facilities. As the center of the groundfish harvest moves west into the Bering Sea, the City of St. Paul hopes to attract vessels for offloading and services, economic activities similar to those now enjoyed by Unalaska. Using St. Paul as a base would save time and fuel for the Bering Sea fishing fleet. St. George is also improving its harbor, but on a smaller scale than St. Paul's. About $6 million has been spent on the harbor to date, and future improvements are in the planning stage.

Processing Jobs Jump in '88, '89

After falling in 1982-1985 as the crab harvest fell, jobs in this industry have steadily increased, posting large gains in the last two years. Employment grew 36% in 1988 and another 33% during the first six months of 1989. Since the groundfish harvest is year-round, these new jobs are also year-round. However, these jobs are not always filled by local residents. An AKDOL report analyzing residency status of workers by firm showed that it is common for seafood processors to have a non-residency rate among their employees of over 50% (when residents are defined as people who filed for a permanent fund dividend). In many cases support staff are recruited locally; they along with management usually live in town.

A considerable number of processing jobs in the Aleutians are not included in Alaska AKDOL statistics. The jobs on floating processors registered in Washington state show up there as manufacturing employment. Of the 263 permits issued by the Alaska Dept. of Environmental Conservation to processing vessels this year, half listed a Washington address for their firm. The vessels on that list, however, are not all large processing facilities; they range in size from 24 to 400 feet. The number of factory trawlers is hard to pinpoint but has been estimated recently at 70 (both Alaska- and Washington-based).

Fish Tax Revenues Fund Local Services

Another important aspect of the seafood industry is the revenue that comes back to the communities from the state's raw fish tax. Most communities also have a local fish tax. Together these monies often fund more than half of the local operations. A tax credit of 50% was extended to shore-based processors in an effort to even out any competitive

advantages enjoyed by the floating processors and encourage land-based investments. Although the legislature did not renew the program this session, firms which already have made qualifying investments can take the tax credit during the next two years. A total of 89 plants statewide took advantage of this program; ten of these are in the Aleutians. The four plants making the largest expenditures ($10-$20 million) are all located in the Aleutians.

The Debate: Onshore vs. Offshore Processors

A long-running debate centers on land-based versus floating processors. While neither type of processing facility employs many local residents, plants on land pay local property taxes in addition to the raw fish tax on pounds of fish delivered to them. However, they are taxed at a lower rate than offshore processors. Some floating processors escape the raw fish tax altogether if they operate outside the 3-mile limit of state control. If offshore processors permanently dock for one year, they are considered onshore and taxed at the lower rate. Shore-based processors also contribute more to the local economy because of their demand for local goods and services.

Besides the debate over contributions to the local economy, a perhaps bigger issue is whether or not the increasing number of factory trawlers will overharvest the resource. Unlike land-based processors, floating plants can simply move to a new region if the resource is exhausted in one area. An example of this occurred in 1989 in the Gulf of Alaska. The quota of pollock was reached by late February; usually this fishery is open through November or even December. Kodiak-based plants were left without pollock to process for the rest of the year, while the factory trawlers simply moved westward to new fishing areas.

Because of the above scenario, there are now proposals before the North Pacific Marine Fisheries Council to begin allocating groundfish among land-based and floating processors. If such an allocation becomes law, more floating processors may permanently dock, thereby qualifying as land-based facilities.

Faced with the possibility of overharvesting, the Council has also set a cut off date for entries in the groundfish industry. Any boat not already in the water (or already under construction) as of January 19, 1990, may, in the future, be barred from fishing in the North Pacific.

Other Issues Face Fishing Industry

There are other issues facing the fishing industry in addition to onshore/offshore allocation and overharvesting. The by-catch of untargeted species can mean early closure of a fishery. This is the first year that federal observers are on vessels fishing in the North Pacific, and the by-catch observed by them on many vessels differs from what was previously reported. The most serious of the by-catch species at this time is the sea lion. Their numbers are decreasing at such an alarming rate that this mammal was recently put on the list of federally protected species. The possibility existed that the sea lion would be placed on the more restrictive federal list of endangered species, which could have meant a total closure of most of the fishing grounds in the Aleutian region.

Another concern is the pollock catch in the "doughnut hole", which affects both U.S. and Soviet stocks. Overharvesting in this area of contested control means fewer fish to migrate into the 200 mile limit of U.S. ownership, and therefore fewer fish for U.S. vessels to harvest. The Magnuson Act is up for re-authorization; these and other questions will then be revisited. Who will set quotas, how will the resource be allocated, will roe-stripping be outlawed, will there be regulations forcing processors to use more fish wastes? This industry will certainly continue to change in the future.

Other Industries Offer Some Jobs in Aleutians

Because of remoteness, there aren't many conventional tourists in the Aleutians. But the Aleutian and Pribilof Islands are a mecca to bird watchers. The bulk of the Alaska Maritime National Wildlife Refuge is in this region, and Adak is home to an elaborate visitor center for the Refuge. The Alaska Marine Highway has one ferry capable of navigating in the rough waters off the Aleutian Islands. It makes 3-4 runs along the Chain each summer, and a few hardy tourists are usually on board.

Mining plays a small part in the Aleutian economy. Offshore oil and gas leasing activity is currently focused on areas other than the Aleutians. Onshore, the geology of the Aleutian Islands does not lend itself to mineral deposits. One former underground gold mine on Unga Island is currently being evaluated for possible production. Located just a few miles from Sand Point, residents of that town may have employment opportunities in the mining industry.

There are many jobs in the Aleutians which are not reflected in the Alaska Dept. of Labor's employment statistics. This is particularly true in the construction industry. Because many construction firms are based in Anchorage, with projects in various other parts of the state, their employment is reported in Anchorage. With three seafood plant expansions and new housing being built in Unalaska, along with harbor improvements in many Aleutian communities and military construction (see section below), there are literally hundreds of construction jobs in the Aleutian region this summer.

The Military: A Large Presence in the Aleutians

The other side of the Aleutian economy is based on Navy and Air Force military installations. Uniformed military and their dependents stationed in the Aleutians account for almost half the population. In addition, there are close to 1,000 civilian workers and dependents in the Aleutians.

Two naval bases are located at Adak and Amchitka; Shemya is home to one of three of the Air Force's "forward ready bases" in Alaska where fighter planes are deployed to protect U.S. borders. The Coast Guard maintains two Loran radar stations with small contingents of personnel. They are located on Attu, the westernmost of the Aleutian Island chain, and on St. Paul in the Pribilof Island group.

The largest of the military bases is the naval station at Adak. Over 5,000 uniformed personnel, civilian employees and dependents of both these categories of people are stationed there. Adak ranks as Alaska's 11th largest community. Perhaps it's confirmation as a "big city" came when McDonald's opened its golden arches on the island.

Construction money on Adak's military base totals $56.5 million for 1990; projects include housing, warehouse, and school facilities. Some construction, though a much smaller amount, is going on at Shemya's air base. The Navy is now testing and evaluating a recently-completed, $60 million project at Amchitka, constructing an over-the-horizon backscatter radar system to track ships at sea. Construction of a second system is scheduled to begin in the summer of 1991. This $60-80 million project will employ 250-300 workers during its two year construction phase.

Income, Unemployment Both Lower Than Most of State

Per capita income in the Aleutian Islands for 1987 was $17,309 -- more than $1,000 lower than the state average. This is not surprising considering average monthly wages are lower than the state average. In 1988, average monthly wages were $2,008 for the Aleutians East Borough and $2,140 for the Aleutian Islands West census area, compared to a state average of $2,310. A large number of seafood processing jobs, which are low-paying, helps to explain the income picture in this region. Subsistence activity, though not measurable, also contributes to the population's welfare.

Though average income is lower than the state average, the Aleutians enjoy the lowest unemployment rates in Alaska. Annual average unemployment was 1.4% (Aleutians East) and 1.3% (Aleutians West) for 1989. The Aleutians is not an area where job seekers linger if no employment opportunity appears. To be included in the labor force, though, a person must either be working or have looked for work within the last four weeks. There are many people who want to work who don't fall into either of these categories, so the true unemployment rate is undoubtedly higher than the official rate when these "discouraged workers" are included.

Summary: Aleutians Economy Tied to Seafood & Military

With few exceptions, there are just two types of communities in the Aleutian and Pribilof Island region: those that depend on the seafood industry and those that depend on the military.

U.S. control of the groundfish harvest has created an economic boom in the Aleutians that is still going on today. More than half the total value of seafood harvested in Alaska is caught in this region. There are many unanswered questions concerning the future of the seafood harvest, especially the groundfish harvest: questions about overharvesting, allocation, utilization of waste material, and by-catch of other species.

The five military enclaves in the Aleutian/Pribilof region account for more than half the area's total population. Millions of defense dollars are spent at these Navy, Air Force and Coast Guard bases, providing jobs not only for uniformed military but civilians also, in addition to jobs for construction workers and service providers.

The Aleutians are a remote, isolated part of Alaska. They are linked more to Seattle than to any city in Alaska. But their economy is growing, more ties to Alaska are being formed, and their future is bright.

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April Employment Shows Slower Growth

By Brian N. Rae

April employment levels continued the recent trend - up both over the month and over the year. The Alaskan economy showed an expected seasonal employment gain of 2.3% between March and April. (See Table 2.) However, when the one-year anniversary of the Exxon Valdez oil spill passed, the following caveat must be applied to over the year employment changes: "1989 data reflect employment levels inflated by oil spill cleanup activities."

Even with this caveat, April's level still topped last April by 3.3%, for two reasons. First, employment for the first three months of 1990 has been well above that of the same period last year -- 4.6% higher in March. Second, April 1989 employment was only slightly inflated by the oil spill work force. By April of last year, only 1,500 [1/] oil spill workers had been hired by VECO and Norcon, the two main contractors for the cleanup work. Year ago comparisons in the summer months will be more problematic, when over the year growth dissipates or perhaps even disappears. (See Figure 1.)

Plans for the 1990 cleanup were released in April, and beach cleaning operations will take place this summer. However, the number of workers will be much smaller than last year (most sources saying between 1,000 and 1,100). While statewide employment numbers will be affected by the reduced work force, the employment drop will be most dramatic in the Gulf Coast region's transportation industry, where these jobs appeared last year.

Table 1

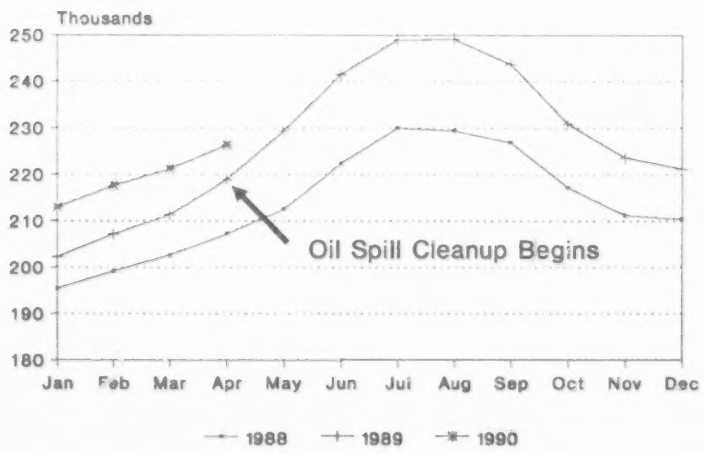
Top Five Statewide Unemployment Rates April 1990

Rank	State	Rate
1	Alaska	7.9%
2	Rhode Island	7.1%
3	Michigan	7.0%
3	West Virginia	6.7%
5	Arkansas	6.2%

Source: West Virginia Department of Employment Security

Figure 1

Alaska Wage and Salary Employment 1/88 through 4/90



Source: Alaska Department of Labor, Research and Analysis Section

Just as over the year employment growth was affected by the oil spill, so too was the unemployment rate. (See Table 5.) April's rate was 7.9%, the same as March's and eight-tenths of a percentage point above last April's figure. Even though higher than last year, the rate is not bad for Alaska for this time of year. The state reclaimed the dubious distinction of having the highest unemployment rate in the nation. (See Table 1.)

State Budget Increases, Includes Lots of Capital Projects

When the final bell rang on the 1990 legislature, the state spending plan for the coming year included something for most everybody. The capital budget saw an increase of $308 million over last year's level; the fiscal year 1991 plan (FY91) totals $700 million. (The State's FY91 plan begins July 1, 1990) Of this, $231.8 million comes from the general fund, $127 million from the Railbelt Energy Fund, and the

remainder (nearly $350 million) from matching monies from the federal government and other sources, such as the International Airport Revenue Fund and the Highway Working Capital Fund.

The 50 plus page capital budget includes projects throughout the entire state. The University of Alaska system picked up two of the larger projects. The Fairbanks campus will see the construction of a $23 million natural sciences building, while the Anchorage campus received $16.5 million for the construction of additional classroom space. The legislature also appropriated $25 million for construction of the Healy Cogeneration Plant (which also received $93.2 million in federal funds). All three of these projects were paid for by the Railbelt Energy Fund.

The general fund's $231.8 million went for projects like the Lake Otis road improvement in Anchorage at $13.1 million, and the Palmer Correctional Facility expansion with a price tag of $5 million. Several large school projects were also paid for through general fund money. In Ketchikan, the local schools were appropriated $7.7 million for asbestos removal and additional building. Stebbins will see the construction of a $6.5 million school, while the proposed Ft. Wainwright elementary school was funded at $8.9 million.

The FY91 operating budget is also higher than last year's, coming in at $2.386 billion in general fund expenditures. As approved by the legislature, this is an increase of about $250 million and a total of 231 new positions. The legislature approved 276 new full time positions, but reduced the number of part time positions by 45.

Oil Prices a Budget Wildcard

Current funding levels face a potentially serious problem. The price of oil has fallen significantly the past several months. The most recent revenue forecast was based on oil selling at $19 per barrel. If prices average only $17 per barrel, there will be a $300 to $400 million revenue shortfall in FY91. (These revenue forecasts will be updated later this summer.)

If oil prices remain soft, agencies and projects may see budget reductions toward the end of the fiscal year. In past years, this has led to not filling positions immediately after they became vacant, delaying some capital projects, or in extreme cases laying off workers or shortening their work week.

The FY91 budget does not include any revenues from the expected tax litigation settlements. However, any such revenue windfalls will go to a budget reserve fund if a proposal is passed by voters in the November election.

Seasonal Industries Picking Up Employment

Alaska has two types of seasonal industries -- those that are dependent upon nature, and those that are dependent on tourists. Those industries at the mercy of nature showed strong

Table 2

Nonagricultural Wage and Salary Employment By Place of Work — Alaska

	p/ 4/90	r/ 3/90	4/89	Changes from: 3/90	4/89
Total Nonag. Wage & Salary	226,300	221,200	218,900	5,100	7,400
Goods-producing	34,700	31,800	32,800	2,900	1,900
Mining	10,400	10,300	9,700	100	700
Construction	8,900	7,900	8,300	1,000	600
Manufacturing	15,400	13,600	14,800	1,800	600
Durable Goods	3,600	3,100	3,500	500	100
Lumber & Wood Products	2,800	2,400	2,700	400	100
Nondurable Goods	11,800	10,500	11,300	1,300	500
Seafood Processing	8,000	6,800	7,700	1,200	300
Pulp Mills	900	900	900	0	0
Service-producing	191,600	189,400	186,100	2,200	5,500
Transportation	18,400	18,300	19,000	100	-600
Trucking & Warehousing	2,200	2,200	2,200	0	0
Water Transportation	1,100	1,000	1,100	100	0
Air Transportation	6,200	6,200	5,600	0	600
Communications	3,100	3,100	3,200	0	-100
Trade	43,800	42,800	42,200	1,000	1,600
Wholesale Trade	8,100	7,900	7,600	200	500
Retail Trade	35,700	34,900	34,600	800	1,100
Gen. Merch. & Apparel	5,100	5,100	5,000	0	100
Food Stores	6,600	6,500	6,300	100	300
Eating & Drinking Places	12,600	12,100	12,400	500	200
Finance-Ins. & Real Estate	10,500	10,500	10,300	0	200
Services & Misc.	47,200	46,500	45,000	700	2,200
Hotels & Lodging Places	4,600	4,500	4,400	100	200
Government	71,700	71,300	69,600	400	2,100
Federal	18,400	18,400	17,700	0	700
State	21,600	21,400	21,100	200	500
Local	31,700	31,500	30,800	200	900

Notes: Prepared in cooperation with the U.S. Bureau of Labor Statistics.

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

The employment numbers that appear above are definitionally different from those that appear in the Labor Force table.

Benchmark date: March 1989

p/ denotes preliminary estimates r/ denotes revised estimates

Source: Alaska Department of Labor, Research & Analysis Section

Table 3

Nonagricultural Wage and Salary Employment By Place of Work

Municipality of Anchorage

	p/ 4/90	r/ 3/90	4/89	Changes from: 3/90	4/89
Total Nonag. Wage & Salary	106,300	104,800	101,500	1,500	4,800
Goods-producing	10,050	9,300	9,650	750	400
Mining	3,650	3,650	3,600	0	50
Construction	4,300	3,650	4,100	650	200
Manufacturing	2,100	2,000	1,950	100	150
Service-producing	96,250	95,500	91,850	750	4,400
Transportation	10,050	9,900	9,300	150	750
Trucking & Warehousing	1,400	1,400	1,350	0	50
Water Transportation	250	200	250	50	0
Air Transportation	3,850	3,850	3,450	0	400
Communications	1,800	1,800	1,800	0	0
Trade	25,400	25,200	24,450	200	950
Wholesale Trade	6,100	5,950	5,750	150	350
Retail Trade	19,300	19,250	18,700	50	600
Gen. Merch. & Apparel	2,700	2,650	2,500	50	200
Food Stores	3,050	3,150	2,950	-100	100
Eating & Drinking Places	7,400	7,300	7,400	100	0
Finance-Ins. & Real Estate	6,850	6,900	6,800	-50	50
Services & Misc.	27,100	26,850	25,350	250	1,750
Hotels & Lodging Places	2,250	2,350	2,150	-100	100
Government	26,850	26,650	25,950	200	900
Federal	10,200	10,250	9,900	-50	300
State	7,900	7,800	7,500	100	400
Local	8,750	8,600	8,550	150	200

Fairbanks North Star Borough

	p/ 4/90	r/ 3/90	4/89	Changes from: 3/90	4/89
Total Nonag. Wage & Salary	26,400	25,700	25,500	700	900
Goods-producing	2,200	1,950	1,900	250	300
Mining	200	150	100	50	100
Construction	1,450	1,300	1,300	150	150
Manufacturing	550	500	500	50	50
Service-producing	24,200	23,750	23,600	450	600
Transportation	1,850	1,800	1,700	50	150
Trucking & Warehousing	450	450	400	0	50
Air Transportation	400	400	300	0	100
Communications	250	250	250	0	0
Trade	5,550	5,350	5,500	200	50
Wholesale Trade	650	700	650	-50	0
Retail Trade	4,900	4,650	4,850	250	50
Gen. Merch. & Apparel	500	500	650	0	-150
Food Stores	800	750	750	50	50
Eating & Drinking Places	1,850	1,650	1,800	200	50
Finance-Ins. & Real Estate	850	850	800	0	50
Services & Misc.	5,750	5,700	5,750	50	0
Government	10,200	10,050	9,850	150	350
Federal	3,150	3,100	3,000	50	150
State	4,300	4,300	4,200	0	100
Local	2,750	2,650	2,650	100	100

Anchorage-MatSu Region

	p/ 4/90	r/ 3/90	4/89	Changes from: 3/90	4/89
Total Nonag. Wage & Salary	113,450	111,700	108,100	1,750	5,350
Goods-producing	10,400	9,550	10,050	850	350
Mining	3,700	3,650	3,750	50	-50
Construction	4,500	3,850	4,300	650	200
Manufacturing	2,200	2,050	2,000	150	200
Service-producing	103,050	102,150	98,050	900	5,000
Transportation	10,700	10,600	9,950	100	750
Trade	27,250	26,900	25,950	350	1,300
Finance-Ins. & Real Estate	7,350	7,350	7,200	0	150
Services & Misc.	28,350	28,100	26,500	250	1,850
Government	29,400	29,200	28,450	200	950
Federal	10,350	10,400	10,050	-50	300
State	8,700	8,600	8,350	100	350
Local	10,350	10,200	10,050	150	300

Interior Region

	p/ 4/90	r/ 3/90	4/89	Changes from: 3/90	4/89
Total Nonag. Wage & Salary	30,350	29,550	29,600	800	750
Goods-producing	2,350	2,150	2,200	200	150
Mining	300	250	300	50	0
Construction	1,500	1,400	1,350	100	150
Manufacturing	550	500	550	50	0
Service-producing	28,000	27,400	27,400	600	600
Transportation	2,050	2,000	1,900	50	150
Trade	5,950	5,700	5,900	250	50
Finance-Ins. & Real Estate	950	950	900	0	50
Services	6,250	6,100	6,350	150	-100
Government	12,800	12,650	12,350	150	450
Federal	3,750	3,700	3,600	50	150
State	4,600	4,600	4,550	0	50
Local	4,450	4,350	4,200	100	250

Notes: Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

The employment numbers that appear above are definitionally different from those that appear in the Labor Force table.

Benchmark date: March 1989 p/ denotes preliminary estimates r/ denotes revised estimates

(cont. on page 17)

Source: Alaska Department of Labor, Research & Analysis Section

Table 3 (cont. from page 16)

Nonagricultural Wage and Salary Employment By Place of Work

Southeast Region

	p/ 4/90	r/ 3/90	Changes from: 4/89	3/90	4/89
Total Nonag. Wage & Salary	32,450	30,800	31,300	1,650	1,150
Goods-producing	6,600	5,300	6,350	1,300	250
Mining	350	350	250	0	100
Construction	1,050	900	1,050	150	0
Manufacturing	5,200	4,050	5,050	1,150	150
Durable Goods	2,550	2,200	2,600	350	-50
Lumber & Wood Products	2,400	2,050	2,400	350	0
Nondurable Goods	2,650	1,850	2,450	800	200
Seafood Processing	1,550	800	1,350	750	200
Pulp Mills	900	900	900	0	0
Service-producing	25,850	25,500	24,950	350	900
Transportation	2,150	2,100	2,050	50	100
Trade	5,100	4,950	4,850	150	250
Wholesale Trade	650	650	500	0	150
Retail Trade	4,450	4,300	4,350	150	100
Finance-Ins. & Real Estate	1,050	1,050	1,050	0	0
Services & Misc.	5,050	5,050	4,900	0	150
Government	12,500	12,350	12,100	150	400
Federal	2,050	2,000	1,950	50	100
State	5,650	5,600	5,500	50	150
Local	4,800	4,750	4,650	50	150

Gulf Coast Region

	p/ 4/90	r/ 3/90	Changes from: 4/89	3/90	4/89
Total Nonag. Wage & Salary	21,400	20,100	22,450	1,300	-1,050
Goods-producing	5,150	4,600	4,950	550	200
Mining	850	850	800	0	50
Construction	1,050	950	950	100	100
Manufacturing	3,250	2,800	3,200	450	50
Seafood Processing	2,300	1,850	2,350	450	-50
Service-producing	16,250	15,500	17,500	750	-1,250
Transportation	1,600	1,550	3,300	50	-1,700
Trade	3,700	3,250	3,650	450	50
Wholesale Trade	500	450	500	50	0
Retail Trade	3,200	2,800	3,150	400	- 50
Finance-Ins. & Real Estate	550	550	550	0	0
Services & Misc.	4,000	3,850	4,000	150	0
Government	6,400	6,300	6,000	100	400
Federal	600	600	500	0	100
State	1,900	1,900	1,850	0	50
Local	3,900	3,800	3,650	100	250

Northern Region

	p/ 4/90	r/ 3/90	Changes from: 4/89	3/90	4/89
Total Nonag. Wage & Salary	14,350	14,350	13,150	0	1,200
Goods-producing	5,800	5,850	5,100	-50	700
Mining	5,200	5,300	4,600	-100	600
Service-producing	8,550	8,500	8,050	50	500
Government	4,650	4,600	4,500	50	150
Federal	300	250	300	50	0
State	350	350	350	0	0
Local	4,000	4,000	3,850	0	150

Southwest Region

	p/ 4/90	r/ 3/90	Changes from: 4/89	3/90	4/89
Total Nonag. Wage & Salary	15,100	15,100	14,600	0	500
Goods-producing	4,400	4,450	4,250	-50	150
Seafood Processing	4,000	4,150	3,950	-150	50
Service-producing	10,700	10,650	10,350	50	350
Government	6,450	6,500	6,350	-50	100
Federal	1,350	1,350	1,350	0	0
State	550	550	550	0	0
Local	4,550	4,600	4,450	-50	100

Notes: Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

The employment numbers that appear above are definitionally different from those that appear in the Labor Force table.

Benchmark date: March 1989 p/ denotes preliminary estimates r/ denotes revised estimates

Source: Alaska Department of Labor, Research & Analysis Section

Table 4

Alaska Hours and Earnings for Selected Industries [1/2]

	Average Weekly Earnings			Average Weekly Hours			Average Hourly Earnings		
	p/ 4/90	r/ 3/90	4/89	p/ 4/90	r/ 3/90	4/89	p/ 4/90	r/ 3/90	4/89
Mining	$1,120.78	$1,162.50	$1,059.85	49.2	50.0	47.0	$22.78	$23.25	$22.55
Construction	1,153.49	1,139.93	1,075.48	49.4	48.2	46.0	23.35	23.65	23.38
Manufacturing	599.85	563.41	553.85	46.5	45.4	47.5	12.90	12.41	11.66
Seafood Processing	483.00	467.86	447.68	50.0	51.3	50.7	9.66	9.12	8.83
Trans., Comm. & Utilities	599.58	585.16	609.41	34.9	34.3	36.8	17.18	17.06	16.56
Trade	414.75	396.31	384.70	35.0	33.7	35.1	11.85	11.76	10.96
Wholesale	580.93	565.57	528.26	39.6	38.5	38.9	14.67	14.69	13.58
Retail	356.71	337.28	336.31	33.4	32.0	33.8	10.68	10.54	9.95
Finance-Ins. & R.E	420.75	415.71	414.78	37.4	35.5	37.2	11.25	11.71	11.15

Notes: p/ denotes preliminary estimates r/ denotes revised estimates Benchmark: March 1989

1/ Prepared in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor.

2/ Retail Trade excludes eating and drinking establishments.

Averages are based on data for full- and part-time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.

Source: Alaska Department of Labor, Research & Analysis Section

growth in April. Seafood processors saw more product coming through their plants. Herring openings boosted employment in some areas, while other plants were just reopening their operations for the new season. In April seafood processing employment rose by over 1,200 workers.

In the timber industry, the gains were seen in logging employment, up nearly 25% for the month. The other sectors, pulp mills and sawmills, are not seasonal industries. Sawmills showed good employment growth for the year with the addition of the Seward sawmill.

For those industries at the mercy of tourists, April is a little too early in the year to see large employment gains. Growth should become evident in May and June, but for April most tourism-related employment was unchanged. Hotels and motels, eating and drinking establishments and tourism-related transportation services showed only small gains.

Employment in trade was mixed. Retail trade, a strong industry last year, continued to grow but at a slower pace. Its 3.7% over the year gain outpaced the overall employment growth of 3.3%. Wholesale trade, although smaller than retail, continues to grow rapidly. Most of the gains are in the sales of durable goods, largely attributable to renewed construction and mining activities.

The link between wholesale trade employment and the construction and mining industries is evident by their employment gains -- all have grown between 6.3% and 6.5% over the year. Construction gained nearly 1,000 jobs since March. Mining employment showed strong growth. The majority of new jobs are in the oil and gas sector, which makes up roughly 90% of the total mining employment. Still, hard rock mining continues to post gains, adding nearly 200 jobs since last April.

Statewide transportation, communications and utilities (TCU) employment fell sharply over the year because of the oil spill activities last year. The 1,500 oil spill workers missing from this April's TCU employment were, however, partially compensated for by other sectors. If the oil spill workers were removed from last year's figures, the industry would have shown a 5.6% employment gain instead of its 2.7% decline.

Air Transportation Boosting Anchorage Employment

The single biggest factor staving off larger employment losses in statewide TCU employment has been the addition of 400 jobs in Anchorage's air transportation industry. When these 400 jobs are combined with gains in other industries, total over the year employment in Anchorage increased by nearly 5,000 jobs. This translates into a 4.7% employment gain, the highest in the state in April. (See Table 3)

Anchorage's air transportation sector remains vigorous, and the expansion of UPS and the new Federal Express

facilities should provide continued strength for the Anchorage air transportation industry. Additional help comes from Continental Airlines' announcement that it would begin service with two flights per day between Anchorage and Seattle. The company plans to hire 12 to 15 workers in Anchorage to service these flights.

Restaurant Closures Slow Trade Job Growth

Like the statewide trend, retail trade employment is beginning to slow in Anchorage. Trade is no longer the employment growth leader in Anchorage. One sector, eating and drinking establishments, declined compared to last April and barely advanced over the month. Part of this poor showing can be attributed to the closure of two chains in Anchorage. Both Shakey's Pizza parlors and Dunkin Donuts ceased operations in April. Shakey's alone employed about 40 people.

The municipality's construction industry looks healthier, with some gains in employment as well as increased building permit applications. The numbers of permits are not even close to past highs, but they are the highest since 1986.

Fairbanks Hopes to Win Its Share of Transportation Industry

In what has become a battle between two cities, Fairbanks is pushing hard to influence where the state's next parcel handling facility will be located. While UPS hopes to win the rights to fly between the U.S. and Japan via Anchorage, Fairbanks hopes that Emery Air Cargo will win the fight.

Fairbanks has already gained some air transportation employment, as Mark Air announced it would locate an aircraft maintenance facility there. Mark Air plans to hire 30 to 40 people, and transfer 10 to 20 from their Anchorage base. This is in addition to the 200 additional employees hired around the state because of Mark Air's expanded routes.

Construction is also recovering in Fairbanks, growing nearly three times as fast as the overall economy for the year. Over the year employment growth in Fairbanks was 2.9%, the second lowest rate (after the Gulf Coast region) in the state. For much of 1988 and part of 1989, Fairbanks was ahead of Anchorage in job growth. Now, however, the city lags behind as Anchorage continues its turnaround.

Gulf Coast Employment -- What Happened?

Under any other circumstances, the over the year decline in Gulf Coast's employment would be considered a disaster. There are more than 1,000 fewer jobs this April than last. Considering the TCU industry is down nearly 1,700 jobs, the remainder of the economy seems pretty healthy. In an interesting turn of events, many of the oil cleanup workers employed in April are showing up as local government employment. Until Exxon had crews in place, the state and localities had organized cleanup crews. Now that Exxon's cleanup is in progress, these crews have for the most part been dismantled.

Many other industries are showing some sluggishness because of the reduced spill activity. Trade and services both have weak over the year growth, but are beginning to show strength when compared to March levels. Like the rest of the state, Gulf Coast construction is showing a comeback, up over 10% compared to last year.

Southeast Continues Pattern of Moderate Growth

Of all the regions, Southeast seems to have the most consistency in employment gains for the year. Some smaller industries, such as mining, are showing larger percentage increases, but this was not unexpected. Most industries, however, are posting gains of between 2% and 4%, with overall employment gaining 3.7% over the year.

Construction employment, forecast to show strong growth for the year, has yet to show significant gains. Some projects have been delayed. One example is the Department of Environmental Conservation building, delayed because of financing problems. Others, such as the Juneau school, are being studied further and may be postponed. The industry is showing normal seasonal growth, but not of the magnitude expected for this year.

Manufacturing employment showed strong seasonal growth, up nearly 30% from March. Since 1989 was a good year for manufacturing in Southeast, there seemed to be little room for over the year employment gains in the industry. Even so, Southeast seafood processing was up by more than 200 workers.

April's Employment - Some Silver Linings?

Overall, April employment behaved as expected, but those expectations had to be tempered with an understanding of the state's recent economic history. Seasonal gains are showing up, predominantly in industries that have to scale back for winter. April is still a little too early for Alaska's tourists to affect employment. Those who follow over the year employment trends must keep in mind the inflated employment levels caused by the Exxon Valdez spill. When this factor is taken into account, April's employment estimates are not as disappointing as they might first appear.

Notes:

Alaska Department of Labor employment estimates are based on the payroll period that includes the 12th of the month. Therefore, while VECO and Norcon had more than 1,500 oil spill cleanup employees mobilized by the end of April, this figure reflects those employees who were on the payroll during the pay period which included the 12th.

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Table 5

Labor Force By Region and Census Area

	Labor Force			Unemployment			Rate			Employment		
	p/ 4/90	r/ 3/90	4/89	p/ 4/90	r/ 3/90	4/89	p/ 4/90	r/ 3/90	4/89	p/ 4/90	r/ 3/90	4/89
Alaska Statewide	251,598	252,084	248,075	19,875	19,923	17,511	7.9%	7.9%	7.1%	231,723	[illegible]	230,564
Anch.-MatSu Region	130,216	131,152	126,544	8,816	8,496	7,743	6.8	6.5	6.1	121,400	122,656	118,801
Municipality of Anchorage	113,328	115,713	112,094	6,619	6,436	5,935	5.8	5.6	5.3	106,709	109,277	106,159
MatSu Borough	16,888	15,439	14,450	2,197	2,060	1,808	13.0	13.3	12.5	14,691	13,379	12,642
Gulf Coast Region	28,401	27,734	29,143	3,456	3,559	2,362	12.2	12.8	8.1	24,945	24,175	26,781
Kenai Peninsula Borough	17,677	17,271	18,230	2,393	2,458	1,821	13.5	14.2	10.0	15,284	14,813	16,409
Kodiak Island Borough	6,131	5,988	6,530	307	344	277	5.0	5.7	4.2	5,824	5,644	6,253
Valdez-Cordova	4,593	4,475	4,383	756	757	264	16.5	16.9	6.0	3,837	3,718	4,119
Interior Region	35,555	35,758	35,662	3,672	3,696	3,621	10.3	10.3	10.2	31,883	32,062	32,041
Fairbanks North Star Bor.	30,498	30,665	30,641	2,853	2,865	2,859	9.4	9.3	9.3	27,645	27,800	27,782
Southeast Fairbanks	2,108	2,123	2,052	341	346	277	16.2	16.3	13.5	1,767	1,777	1,775
Yukon-Koyukuk	2,949	2,970	2,969	478	485	485	16.2	16.3	16.3	2,471	2,485	2,484
Northern Region	8,565	8,669	8,095	806	695	657	9.4	8.0	8.1	7,759	7,974	7,438
Nome	3,184	3,213	3,031	346	296	310	10.9	9.2	10.2	2,838	2,917	2,721
North Slope Borough	3,046	3,123	2,933	111	107	120	3.6	3.4	4.1	2,935	3,016	2,813
Northwest Arctic Borough	2,335	2,333	2,131	349	292	227	14.9	12.5	10.7	1,986	2,041	1,904
Southeast Region	35,514	35,141	35,277	2,392	2,802	2,416	6.7	8.0	6.8	33,122	32,339	32,861
Haines Borough	844	854	877	56	85	96	6.6	10.0	10.9	788	769	781
Juneau Borough	15,719	15,401	15,550	741	776	689	4.7	5.0	4.4	14,978	14,625	14,861
Ketchikan Gateway Bor.	6,714	6,642	6,573	576	649	483	8.6	9.8	7.3	6,138	5,993	6,090
Pr. of Wales-Outer Ketch.	2,778	2,736	2,743	335	351	320	12.1	12.8	11.7	2,443	2,385	2,423
Sitka Borough	4,051	4,053	4,007	149	244	136	3.7	6.0	3.4	3,902	3,809	3,871
Skagway-Yakutat-Angoon	1,799	1,803	1,736	274	314	223	15.2	17.4	12.8	1,525	1,489	1,513
Wrangell-Petersburg	3,609	3,652	3,791	261	383	469	7.2	10.5	12.4	3,348	3,269	3,322
Southwest Region	13,347	13,630	13,354	733	675	712	5.5	5.0	5.3	12,614	12,955	12,642
Aleutians East Borough	932	960	931	9	12	6	1.0	1.3	0.6	923	948	925
Aleutians West	2,624	2,693	2,626	37	36	33	1.4	1.3	1.3	2,587	2,657	2,593
Bethel	5,098	5,180	5,125	317	270	333	6.2	5.2	6.5	4,781	4,910	4,792
Bristol Bay Borough	516	532	517	28	31	28	5.4	5.8	5.4	488	501	489
Dillingham	2,455	2,494	2,427	171	148	138	7.0	5.9	5.7	2,284	2,346	2,289
Wade Hampton	1,722	1,771	1,728	171	178	174	9.9	10.1	10.1	1,551	1,593	1,554

Notes: p/ denotes preliminary estimates r/ denotes revised estimates Benchmark: 1989

- Federal guidelines require the use of unrounded labor force data, adjusted to be consistent with the Current Population Survey in formulas used to allocate federal funds.
- Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor.
- The official definition of unemployment currently in place excludes anyone who has made no attempt to find work in the four-week period up to and including the week that includes the 12th of each month. Most Alaska economists believe that Alaska's rural localities have proportionately more of these discouraged workers.
- The employment numbers that appear above are definitionally different from those that appear in the Nonagricultural Wage & Salary Employment tables.

Source: Alaska Department of Labor, Research & Analysis Section.

Alaska Economic Regions

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